REMARKS

Claims in the case are 1-5, 9-10, 12-15 and 19-22. Claims 1, 5, 13 and 15 have been amended herein.

Claims 1, 5, 13 and 15 stand rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed in light of the amendments herein and the following remarks.

Claim 1 has been amended herein to include Markush language in (C) and (D). Claim 5 has been amended herein to include Markush language in (B.1.1) and (B.1.2). Claim 5 has been further amended to replace "and derivatives of unsaturated carboxylic acids" with --anhydrides of unsaturated carboxylic acids and imides of unsaturated carboxylic acids--. Basis for the amendment to Claim 5 is found at page 10, lines 20-24 of the specification.

Claim 13 has been amended to include Markush language. Claim 15 has been amended to replace "further additives" with --at least one additive selected from the group consisting of lubricants, mould release agents, nucleating agents, anti-static agents, stabilisers, dyes and pigments--. Basis for the amendment to Claim 15 is found in Claim 13 and at page 21, lines 1-3 of the specification.

In light of the amendments herein and the preceding comments, Applicants' claims are deemed to particularly point out and distinctly claim the subject matter which they regard as their invention. Reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-5, 9-10, 12-15 and 19-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over EP 0 728 811 (**Maruyama et al**) in view of United States Patent No. 4,937,285 (**Witmann '285**), United States Patent No.5,126,404 (**Thomas et al**), or United States Patent No. 5,552,465 (**Witmann '465**). This rejection is respectfully traversed with regard to the following remarks.

The thermoplastic molding composition of Applicants' claims comprises: (A) an aromatic polycarbonate and/or polyester carbonate; (B) a graft polymer prepared by means of a graft polymerization in the presence of a redox initiator system comprising (i) an organic hydroperoxide and (ii) ascorbic acid (the graft polymerization having a grafting yield of > 60 wt.%); (C) optionally a thermoploastic vinyl (co)polymer and/or polyalkylene terephthalate; (D) a phosphazene selected

from those represented by formulas Ia and/or Ib (see Claim 1); and (E) optionally a fluorinated polyolefin. Thermoplastic molding compositions according Applicants' present claims provide a combination of excellent flame resistance coupled with improved mechanical properties, as compared to compositions comprising graft polymers prepared using a different initiator system (i.e., a non-redox initiator system).

Maruyama et al disclose thermoplastic resin compositions comprising an aromatic polycarbonate, a graft copolymer and a phosphazene (abstract). Maruyama et al do not disclose, teach or suggest preparing the graft copolymer component of their composition by means of a redox initiator system comprising an organic hydroperoxide and ascorbic acid. Further, Maruyama et al do not disclose, teach or suggest the grafting yield of the graft copolymer of their compositions. The graft copolymer of Maruyama et al's examples is prepared using cumene hydroperoxide in the absence of ascorbic acid (page 5, line 56 - page 6, line 7).

Wittmann '285 disclose compositions comprising aromatic polycarbonates and graft polymers (abstract). The graft polymers of Wittmann '285 are prepared using an initiator system which includes an organic hydroperoxide and ascorbic acid (column 2, lines 11-22). The compositions of Wittmann '285 are further disclosed as optionally including additives, such as flame retardants (column 11, lines 41-47). However, the flame retardants of Wittmann '285 are not further described. The compositions of Wittmann '285 are disclosed and stressed as possessing improved petroleum resistance (column 4, lines 20-29).

Thomas et al disclose thermoplastic molding compositions comprising a polycarbonate based on substituted dihydroxydiphenyl cycloalkanes, and a graft polymer (abstract). The graft polymer of Thomas et al is disclosed as being prepared using an initiator system which includes an organic hydroperoxide and ascorbic acid (column 1, lines 11-37). The compositions of Thomas et al are disclosed as optionally including additives, such as flameproofing agents (column 13, lines 13-18). However, the optional flameproofing agents of Thomas et al's compositions are not further described.

Wittmann '285, Witmann '465 and Thomas et al each disclose compositions comprising aromatic polycarbonates, graft polymers prepared by means of a redox system comprising organic hydroperoxide and ascorbic acid, and flameproofing agents. However, Wittmann '285, Witmann '465 and Thomas et al, either alone or in combination, provide no disclosure, teaching or suggestion as to selecting their flameproofing agents from phosphazenes. Witmann '285 and Thomas et al provide no further disclosure or description of the flameproofing agents that may be used in their compositions, other than by use of the terms "flameproofing agents" or "flame retardants." Witmann '465 disclose only a specific class of phosphorous compounds that may be included in their compositions. The specific class of phosphorous compounds of Witmann '465 are not suggested as including phosphazenes.

The flame retardants of Maruyama et al's compositions are narrowly disclosed as being selected from phosphazenes. Maruyama et al **teach away** from the use of phosphorous compounds that are other than phosphazenes in their compositions (e.g., thriphenyl phosphate, phosphoric esters and phosphoric ester oligomers). For example, Maruyama et al disclose that phosphoric esters typically have low melting points and poor compatibility with the resins into which they are incorporated. Such phosphoric ester containing resin compositions are further disclosed as suffering from various physical and processing deficiencies, such as reduced heat resistance and oozing of the phosphoric ester upon molding. See page 2, lines 12-41 of Maruyama et al. Further, Maruyama et al provide no disclosure, teaching or suggestion as to preparing the graft copolymers of their compositions using an organic hydroperoxide and ascorbic acid.

On page 3 of the Office Action of August 30, 2002, the Examiner argues that Maruyama et al only teaches away from replacing phosphazenes with phosphates (rather than teaching away from a combination of phosphazenes and phosphate flame retardants). Applicants respectfully disagree with the Examiner's opinion. Maruyama et al clearly disclosure: (i) the negative and undesirable effects associated with the use of non-phosphazene flame retardants, such as phosphoric esters (as summarized above); and (ii) the improved flame resistance of phosphazenes relative to non-phosphazene flame retardants, such as phosphoric

acid esters. As such, one of ordinary skill in the art would be reasonably expected to interpret Maruyama et al as teaching away from the use of non-phosphazene flame retardants, in particular phosphoric acid esters, either alone or in combination with phosphazene flame retardants.

On page 3 of the Office Action, the Examiner argues further that Maruyama et al's disclosure as to the optional presence of flame retardants other than phosphazenes is counter to Applicants' assertion as to Maruyama et al teaching away from use of phosphorous compounds that are other than phosphazenes in their compositions. Applicants respectfully disagree. Maruyama et al provide no other disclosure or suggestion as to what these optional flame retardants would be. In light of Maruyama et al's teaching away from the use of phosphates, one of ordinary skill in the art would not be reasonably expected to consider phosphates as an optional flame retardant that could be included in Maruyama et al's composition.

As such, it is respectfully submitted that none of the cited referecnes provide the requisite motivation to combine their respective teachings in the manner suggested in the Office Action of August 30, 2002. Maruyama et al teach away from the use of phosphoric acid esters as flame retardants, and Witmann '465 specifically discloses the necessary presence of phosphoric acid esters as flame retardants in their compositions. Maruyama et al disclose and teach the necessary presence of phosphazene flame retardants in their compositions, while none of Wittmann '285, Thomas et al and Witmann '465 disclose or suggest the presence of or use of phosphazene flame retardants in their compositions.

As the Court of Appeals for the Federal Circuit has stated, there are three possible sources for motivation to combine references in a manner that would render claims obvious. These are (1) the nature of the problem to be solved, (2) the teaching of the prior art, and (3) the knowledge of persons of ordinary skill in the art, In re Rouffet, 47 USPQ 2d 1453, 1458 (Fed. Cir. 1998). The nature of the problem to be solved and the knowledge of persons of ordinary skill in the art are not present here and have not been relied upon in the rejection. As for the teaching of the prior art, the above discussion has established that none of the references relied upon in the rejection provide the requisite teaching, and certainly do not provide the motivation or suggestion to combine that is required by Court decisions.

It is respectfully submitted that the rejection impermissibly use Applicants' specification as a blueprint for selecting and combining or modifying the prior art to arrive at their claimed invention, thereby making use of prohibited hindsight in the selection and application of that prior art. The use of hindsight reconstruction of an invention is an inappropriate process by which to determine patentability. In re Rouffet, 47 USPQ 2d 1453, 1457 (Fed. Cir. 1998).

Applicants wish to direct attention to the examples of their specification which are deemed to demonstrate unexpected results obtained with compositions according to their invention. In particular, the examples demonstrate the criticality of the graft yield of graft polymer B of Applicants' presently composition being greater than 60 wt.%. The graft polymer Ba of Example 1 has a grafting yield of 89 wt.% (page 25, line 24), while the graft polymer Bb of Comparative Example 2 has a grafting yield of 55 wt.% (page 26, line 23). Further particularly, the examples demonstrate that thermoplastic compositions according to Applicants' invention provide excellent flame resistance **in combination with** improved notched impact strength, weld line strength and stress cracking resistance, relative to the comparative example. Such a combination of physical properties is desirable in, for example, thin-walled articles, such as thin-walled casing components (page 29, enumerated lines 4-9, below the table). The cited references, either alone or in combination, provide no disclosure, suggestion or teaching as to such a desirable **combination** of physical properties.

In light of the preceding comments, Applicants' claims are deemed to be unobvious and patentable over Maruyama et al in view of Wittmann '285, Thomas et al or Witmann '465. Reconsideration and withdrawal of this rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to meet all the requirements of 35 U.S.C. §112, and to define an invention that is unanticipated, unovbious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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VERSIONS WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS: (Marked-Up)

The following are versions of the amended claims with markings to show changes made thereto in the present Amendment.

1. (Twice Amended, Marked-Up) A thermoplastic moulding composition comprising:

A) 40 to 99 parts by weight of at least one of aromatic polycarbonate and polyester carbonate;

B) 0.5 to 60 parts by weight of a graft polymer prepared from,

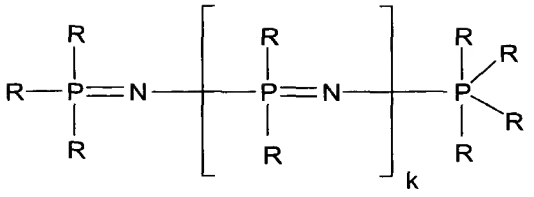
B.1) 5 to 95 wt.% of one or more vinyl monomers, and

B.2) 95 to 5 wt.% of one or more particulate diene rubbers having a glass transition temperature of <10°C, which are produced by emulsion polymerisation,

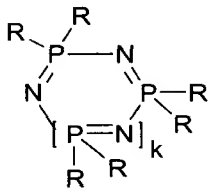
said graft polymer being prepared by means of a graft polymerisation in the presence of an initiator system comprising an organic hydroperoxide and ascorbic acid, said graft polymerisation having a grafting yield of > 60 wt.%;

C) 0 to 45 parts by weight of at least one thermoplastic polymer selected from the group consisting of thermoplastic vinyl (co)polymers and polyalkylene terephthalates;

D) 0.1 to 50 parts by weight of at least one component selected from the group consisting of phosphazenes represented by the following formulae,



(Ia),



(Ib),

in which

R is in each case identical or different and denotes amino, C_1 to C_8 alkyl, in each case optionally halogenated, or C_1 to C_8 alkoxy, C_5 to C_6 cycloalkyl, C_6 to C_{20} aryl, C_6 to C_{20} aryloxy, or C_7 to C_{12} aralkyl, in each case optionally substituted by alkyl and/or halogen,

k denotes 0 or a number from 1 to 15; and

E) 0 to 5 parts by weight of fluorinated polyolefin.

5. (Thrice Amended, Marked-Up) The moulding composition of Claim 1 wherein vinyl monomers B.1 are mixtures prepared from:

B.1.1 50 to 99 parts by weight of at least one [of] member selected from the group consisting of vinyl aromatics, ring-substituted vinyl aromatics and methacrylic acid (C_1-C_8)-alkyl esters; and

B.1.2 1 to 50 parts by weight of at least one [of] member selected from the group consisting of vinyl cyanides, (meth)acrylic acid (C_1-C_8)-alkyl esters, [and derivatives] anhydrides of unsaturated carboxylic acids and imides of unsaturated carboxylic acids.

13. (Thrice Amended, Marked-Up) The moulding composition of Claim 1 further comprising at least one additive selected from the group consisting of lubricants, mould release agents, nucleating agents, anti-static agents, stabilisers, dyes and pigments.

15. (Twice Amended, Marked-Up) A method of producing the moulding composition of Claim 1 comprising mixing and melt-compounding components A to E and optionally [further additives] at least one additive selected from the group consisting of lubricants, mould release agents, nucleating agents, anti-static agents, stabilisers, dyes and pigments.